The impact of COVID-19 on antimalarial supply chains in Ghana

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The COVID-19 crisis has indirectly affected health-care provision and outcomes for many non-COVID-19 conditions. Our research in Ghana suggests that the COVID-19 pandemic might be reducing the availability of antimalarials in private sector pharmacies and over-the-counter (OTC) medicine outlets, which are major sources of essential medicines.

As part of a larger project tracing antimalarial supply chains in Africa, we collected data on antimalarial medicines available at 89 licensed outlets across four regions of Ghana (Savannah [22 outlets], Volta [23 outlets], Upper East [22 outlets], and Western North [22 outlets]) using a two-stage stratified sampling procedure. The sample comprised 23 retail pharmacies and 66 OTC medicine outlets (38 were in urban locations and 51 in rural locations). The data were collected between Sept 1, 2020, and Dec 20, 2020, when there was a high number of people with COVID-19 in Ghana (44 460 on Sept 1, 2020, increasing to 54 043 by Dec 25, 2020).[1] Although not part of our original study design, we questioned store managers on the perceived effects of the COVID-19 pandemic on medicine supplies. Specifically, we asked store managers whether their antimalarial supplies had increased, decreased, or remained the same since the start of the COVID-19 pandemic.

Altogether, 45 of 89 participants reported that their supplies of antimalarials had decreased since the start of the COVID-19 pandemic, 42 participants reported no change, and two reported that some supplies had increased and others had decreased. This pattern was broadly consistent across pharmacies and OTC medicine outlets and between rural and urban areas. However, there were significant regional differences. Six of 23 outlets in Volta (close to Accra the capital city) reported a worsening supply since the start of the COVID-19 pandemic, compared with ten of 22 outlets in Savannah, 14 of 22 in Western North, and 15 of 22 in Upper East ($p=0{\cdot}021$ [χ^2 test]).

Our findings should be interpreted with caution—we sampled just four of the 16 regions in Ghana and the data were self reported, relying on recall of the pre-pandemic situation, and represented a snapshot of one point in time, precluding additional longitudinal analysis. Nonetheless, the picture is alarming and suggests that the impact of the COVID-19 pandemic on the health of Ghanaians could be far reaching. Regional disparities, with areas further from the capital (Accra; the main port of entry and manufacture of medicines) disproportionately affected by the COVID-19 pandemic, compounded existing inequalities in health-care provision across the country.[2]

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1 Sasu DD. Cumulative number of confirmed coronavirus cases (COVID-19) in Ghana as of July 12, 2021. July 23, 2021. https://www.statista.com/statistics/1110892/coronavirus-cumulative-cases-in-ghana/ (accessed June 21, 2021).

2 Ghana Health Service. The health sector in Ghana. Facts and figures. 2018. https://ghanahealthservice.org/downloads/Facts+Figures_2018.pdf (accessed June 21, 2021).